Adventures in Aeronautics			
2007 Mathematics			
Core Curriculum			
Utah Mathematics			
Grade 3			
Activity/Lesson	**State**	**Standards**	
Adventures in Aeronautics	UT	MA.3.1.1.d	Order and compare whole numbers on a number line and use the symbols <, >, "not equal to," and = when comparing whole numbers.
Adventures in Aeronautics	UT	MA.3.1.3.a	Demonstrate the meaning of multiplication and division of whole numbers through the use of a variety of representations (e.g., equal-sized groups, arrays, area models, and equal jumps on a number line for multiplication, partitioning and sharing for division).
Adventures in Aeronautics	UT	MA.3.1.3.b	Use a variety of strategies and tools, such as repeated addition or subtraction, equal jumps on the number line, and counters arranged in arrays to model multiplication and division problems.
Adventures in Aeronautics	UT	MA.3.1.3.c	Demonstrate, using objects, that multiplication and division by the same number are inverse operations (e.g., 3 x "Square" = 12 is the same as 12 ÷ 3 = "Square" and "Square" = 4).
Adventures in Aeronautics	UT	MA.3.1.3.d	Demonstrate the effect of place value when multiplying whole numbers by 10.
Adventures in Aeronautics	UT	MA.3.1.3.e	Write a story problem that relates to a given addition, subtraction, or multiplication equation, and write a number sentence to solve a problem related to the students' environment.
Adventures in Aeronautics	UT	MA.3.1.4.b	Find the sum or difference of numbers, including monetary amounts, using models and strategies such as expanded form, compensation, partial sums, and the standard algorithm.
Adventures in Aeronautics	UT	MA.3.2.2.c	Use the >, <, and = symbols to compare two expressions involving addition and subtraction (e.g., 4 + 6 __ 3 + 2; 3 + 5 __ 16 - 9).
Adventures in Aeronautics	UT	MA.3.4.1.a	Describe the part-whole relationships (e.g., 3 feet in a yard, a foot is 1/3 of a yard) between metric units of length (i.e., centimeter, meter), and among customary units of length (i.e., inch, foot, yard), capacity (i.e., cup, quart), and weight (i.e., pound, ounce).
Adventures in Aeronautics	UT	MA.3.4.1.c	Measure capacity using cups and quarts, and measure weight using pounds and ounces.
Adventures in Aeronautics	UT	MA.3.4.2.b	Compare given objects according to measurable attributes (i.e., length, weight, capacity).
Adventures in Aeronautics	UT	MA.3.4.2.d	Determine elapsed time in hours (e.g., 7:00 a.m. to 2:00 p.m.).

Adventures in Aeronautics			
2007 Mathematics			
Core Curriculum			
Utah Mathematics			
Grade 4			
Activity/Lesson	**State**	**Standards**	
Adventures in Aeronautics	UT	MA.4.1.2.b	Order whole numbers up to six digits, simple fractions, and decimals using a variety of methods (e.g., number line, fraction pieces) and use the symbols <, >, and = to record the relationships.
Adventures in Aeronautics	UT	MA.4.1.3.a	Model multiplication (e.g., equal-sized groups, rectangular arrays, area models, equal intervals on the number line), place value, and properties of operations to represent multiplication of a one- or two-digit factor by a two-digit factor and connect the representation to an algorithm.
Adventures in Aeronautics	UT	MA.4.1.3.c	Demonstrate the mathematical relationship between multiplication and division (e.g., 3 x __ = 12 is the same as 12 ÷ 3 = __ and __ = 4) and use that relationship to explain that division by zero is not possible.
Adventures in Aeronautics	UT	MA.4.1.4.c	Write a story problem that relates to a given multiplication or division equation, and select and write a number sentence to solve a problem related to the environment.
Adventures in Aeronautics	UT	MA.4.2.1.c	Identify simple relationships in real-life contexts and use mathematical operations to describe the pattern (e.g., the number of legs on a given number of chairs may be determined by counting by fours or by multiplying the number of chairs by 4).
Adventures in Aeronautics	UT	MA.4.4.1.c	Estimate and measure capacity using milliliters, liters, cups, pints, quarts, and gallons, and measure weight using grams and kilograms.
Adventures in Aeronautics			
2007 Mathematics			
Core Curriculum			
Utah Mathematics			
Grade 5			
Activity/Lesson	**State**	**Standards**	
Adventures in Aeronautics	UT	MA.5.1.2.b	Order integers, fractions (including mixed numbers), and decimals using a variety of methods, including the number line.
Adventures in Aeronautics	UT	MA.5.1.4.b	Describe the effect of place value when multiplying and dividing whole numbers and decimals by 10, 100, and 1,000.

Adventures in Aeronautics	UT	MA.5.2.2.a	Use properties and the order of operations involving addition, subtraction, multiplication, division, and the use of parentheses to compute with whole numbers, decimals, and fractions.
Adventures in Aeronautics	UT	MA.5.3.2.c	Specify possible paths between locations on a coordinate plane and compare distances of the various paths.